

FEDERAL RESPONSE TO A DOMESTIC NUCLEAR ATTACK

by

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Federal Response to a Domestic Nuclear Attack

James C. Mercer

Introduction

*The risk of a nuclear weapon being used today is growing,
not receding.*

—Senator Sam Nunn

The United States government needs to plan for and prepare against terrorist attacks. Terrorism, when combined with weapons of mass destruction, increases the planning complexity. In the event of a nuclear terrorist attack, the government will need to conduct consequence management in the affected areas, govern the non-affected areas, and prevent future attacks. This paper examines what actions, following a nuclear terrorist attack on domestic soil, produce the broadest and deepest results and what options the President has to address such a national emergency. The federal government must address the national effects caused by the attack itself as well as the anticipated results caused by communities enacting protective measures at the detriment of their neighbors. To produce the list of coordinated actions and options, this paper uses a scenario where a terrorist loads a 10-kiloton (kt) weapon into a truck, drives it to the nation's capital, and detonates it. After detonation, the government must attempt to mitigate the weapon's real and perceived effects. A review of the mitigating responses reveals that some actions are nearly impossible without prior planning and coordination. Additionally, the government must operate within a framework of constitutionally granted authorities. Continuity of government is assumed sufficient to exercise command and control and is beyond the scope of this paper. It is also beyond the scope of this paper to present more than a cursory overview of preventing a subsequent attack.

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This paper reviews the physical characteristics of a nuclear detonation using a 10-kt weapon as the baseline for distances and time effects. These effects and the ensuing chain of events produce probable governmental mitigating actions. To state the obvious, prior planning greatly enhances the outcome of some of these actions. However, prior planning cannot completely mitigate the overwhelming calamity of a nuclear attack. Drastic measures will be required. There are explicit and implicit constitutional authorities available to the President. Throughout the country's history, Congress has used its constitutional authority to delegate additional power to the President during periods of duress. This paper reviews four Supreme Court martial law cases used to distill guiding principles.

It Happens

Nuclear terrorism is still often treated as science fiction—I wish it were. But unfortunately we live in a world of excess hazardous materials and abundant technological know-how, in which some terrorists clearly state their intention to inflict catastrophic casualties.

— Kofi Annan¹

The most difficult aspect of developing and producing a nuclear device is the refinement of the required fissile material. Most experts postulate only state actors possess the required centrifuge capability to produce highly enriched uranium (HEU) or plutonium. The number of countries with nuclear programs has grown over the last 50 years. Because of the growth of both the acknowledged and clandestine programs, the nuclear community does not know the exact promulgation of the requisite resources and technology. Additionally, some nuclear states may not have nuclear security procedures sufficient to prevent nefarious individuals from stealing fissile material or nuclear weapons. This means one cannot completely discount a determined group gaining access to a nuclear device or the material and knowledge to build one. Whether acquired as a gift from a rogue nation or stolen, the result would be a nuclear device in the hands of terrorists. Regardless of the method of obtaining a device, ground

or sea transportation to the detonation location is almost certainly the likely delivery method. Dr. William Perry postulates it is more likely a nuclear device will arrive in Washington, D.C. or New York City via a truck or freighter than a missile.²

In our scenario, terrorists deliver a hypothetical 10-kt nuclear device by ground transportation and detonate it in Washington, D.C. Ground delivery eliminates the technical challenges of aerial delivery and detonation. With an aerial delivery, the user may attempt to optimize the detonation altitude for a desired effect. This “ground burst” would differ from the “air burst” of those used over Japan during World War II. Aerial detonations cause approximately twice the blast and flash radiation effects, while a ground detonation produces more radioactive fallout.³ In general, aerial detonations produce more immediate effects and ground detonations more delayed effects. In order to appreciate the government’s actions to mitigate the effects, one must first understand what happens during a nuclear detonation.

Immediate and Delayed Effects on the Local Area

Nuclear weapons cause immediate and delayed effects upon detonation. The immediate effects are tremendous, and they are almost impossible to overcome after detonation has occurred. In contrast, post-detonation actions can mitigate some of the delayed effects (i.e., evacuation out of the radioactive plume area). However, without thorough planning and rehearsal, the ensuing confusion of a detonation will severely limit any successful mitigating actions. Prior to determining what should be done, one must understand what occurs during a nuclear detonation.

Blast effects, thermal fireball, and flash radiation are the immediate effects of a nuclear detonation. Barotraumas are the primary blast effect. Barotraumas are the overpressurization and underpressurization affecting air-filled bodily cavities. Eardrums are ruptured at 5 psi, lungs are injured at 15 psi, and effects are fatal at 50 psi. Penetrating objects and trajectory fragments cause secondary blast effects. Collapsing infrastructure and traumas sustained by windblast are tertiary effects. The damage of the blast wave dissipates exponentially with the distance from the detonation. As the outward energy dissipates, an underpressurization occurs and winds blow inward toward the blast.⁴

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The resulting fireball will produce thermal and burn injuries. The fireball has both immediate and delayed effects. The fireball immediately vaporizes everything inside it with temperature exceeding 10M degrees Celsius. The fireball, carrying upward the vaporized items including soil and water, creates the mushroom cloud.⁵ The thermal energy of the fireball causes secondary fires, with the spread controlled by the conditions of the construction, geography, and meteorological conditions.⁶ Blindness would also result. Individuals not looking directly at the blast will experience temporary blindness lasting as little as a few seconds. Blast size, proximity, and meteorological conditions will affect the severity of the blindness. Retinal scarring will occur for those directly viewing the blast. The location of the retina scarring directly affects the severity of the permanent disability.⁷

Radiation fallout from the detonation has decaying effects with both immediate and delayed impact. In addition to the residual radiation, flash or prompt radiation will cause immediate injury and fatalities. Distance, time, and shielding govern the effects of fallout. Exposure to fallout is most dangerous in the first few hours and decays rapidly with time. Example, for our hypothetical 10-kt detonation, after 3 hours the risk to radiation is reduced to 20% of the initial exposure levels. After 8 hours it's reduced to 10%, and at 48 hours it's down to 1%.⁸ The basic instruction for most of the population around a nuclear detonation is to shelter and shield in place for three days. Unshielded on an open highway without the freedom of movement is a very dangerous place for individuals.

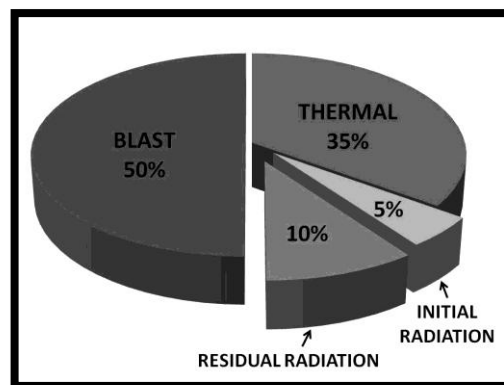


Figure 1: Approximate Effects of a Nuclear Weapon Based on Energy Dispersed⁹

The above graph depicts one method of approximating the effects of a nuclear weapon based on energy dispersed. The blast wave produces 50% of the device's energy compared to only the 5% dispersed by the initial radiation. Dispersed energy does not correlate to the effects' range measured in distance from the epicenter. For our hypothetical 10-kt device, a 50% mortality rate extends 0.4 miles from the epicenter for blast effects, 1.1 miles for the fireball, and 0.8 miles for the initial radiation. The residual radiation of 400 rads¹⁰ could extend up to 6 miles downwind.¹¹

Hypothetical Cases

This paper briefly reviews two hypothetical case studies to illustrate the magnitude of a nuclear incident. The first case study, conducted by the Homeland Security Council, uses a 10-kt ground detonation device near the White House. Based on prevailing wind direction and speed, the study estimated over 150,000 severe injuries with a possible 70% mortality rate. The injured would include severe burns, lacerations and punctures caused by high-speed projectiles, and radiation illness all requiring sophisticated equipment and medical procedures. Over 100,000 individuals would require decontamination by current standards, overwhelming the regional capabilities. It is predicted over 500,000 individuals would attempt to evacuate, effectively closing both egress and ingress routes.¹² The blast would damage or destroy bridges and tunnels further restricting transportation options.

The second case study completed by the RAND Corporation looks at the predicted effects on the port of Long Beach, California. In this scenario, a 10-kt nuclear device is offloaded from a ship onto the dock in a modular container and then detonated. The results are similar to the Washington case study. Over 60,000 fatalities would occur in 72 hours. Over 150,000 individuals would require decontamination. It is predicted that over 6-million would attempt to evacuate. And 2 to 3 million might need to be relocated due to the fallout. The coastal location produces an egress barrier for most of the inhabitants. In both these cases, it is assumed first responders will subject themselves to large doses of radiation and become victims themselves. The most critical lifesaving response may be not administering medical care to those injured by the blast. Instead, the most effective method of lifesaving may be to address the choice between

evacuation and shelter-in-place.¹³ It is beyond the scope of this paper to address the long-term effects or the recovery of the destroyed city.

What Needs to be Done

The powers not delegated to the United States by the Constitution, nor prohibited by it to the states, are reserved to the states respectively, or to the people.

—Tenth Amendment, United States Constitution

Our government and our Federal Response Framework expect first responders to be from the local community. Local and state governments have the authority and responsibility to respond and control the situation in the affected area. Current plans and statutes call for the federal government to *support* these local and state governments during emergencies.

In response to the terrorist attacks on September 11, 2001, the federal government undertook the most massive organizational realignment in the country's history. This organizational realignment consolidated and attempted to streamline the activities, authorities, and responsibilities of a variety of government agencies. The Department of Homeland Security (DHS) was created to achieve synergy amongst the federal governmental organizations for the security of the country's homeland. Additionally, Congress and the President charged DHS with updating and consolidating the numerous federal emergency plans into a single, integrated, and coordinated national response plan.¹⁴ This consolidated response plan, call the National Response Plan (NRP), was produced and released in 2003. Perceived problems with the implementation of the NRP during Hurricane Katrina led Congress to enact the Post-Katrina Emergency Management Relief Act of 2006. This Act directs DHS to issue a restructured plan incorporating the numerous lessons learned. This new plan is the National Response Framework (NRF).¹⁵

The NRF is the cornerstone document for the national homeland security strategy. It provides the doctrine and the guiding principles for the unified response for all levels of government and communities for all

types of emergencies and hazards. The NRF includes the roles and responsibilities for all actors for all phases of emergency response. However, it is heavily geared towards response and short-term recovery. The 80-page NRF document attempts to establish a national framework promoting user discretion and flexibility. It uses eight incident annexes to guide the planning for specific contingencies or hazardous situations. It was designed to streamline and improve the 400-page overly bureaucratic and complicated NRP document.¹⁶ Beyond the NRP's confusing style and format, a major critique was that it was not an operational plan. The President, in order to overcome the lack of comprehensive operational plans, issued Homeland Security Presidential Directive-8 (HSPD-8) in 2003, directing the DHS to establish the federal standardized planning process. In conjunction with the release of the NRF in order to satisfy HSPD-8 dictates, DHS created the *Federal Partner Response Guide* and the *Integrated Planning System*. The partners guide provides key roles and actions for actors at the federal, state, and local levels of government in addition to nongovernmental and private-organization partners. The planning system details the collaborative process between the tiers of government for the various incident scenarios. However, these guides have not been completed or released.¹⁷

It is difficult to determine the national level of response capability to a nuclear terrorist attack scenario since some of the planning guidance is still being developed. However, the NRF's nuclear/radiological incident annex describes the response concept of operations to an attack. The annex commences by stating the incident will be handled by the lowest governmental level possible. However, it spends the majority of the remainder of the annex describing the federal government's role in the response and recovery, mostly because the majority of the technical expertise resides in the Department of Energy. It also states the Secretary of Homeland Security is the principal agent for coordinating the federal response. The Secretary's role as the principal federal agent is common across the incident annex for the eight scenarios.¹⁸ Thus, the NRF seems self-contradicting in that the lowest level will control the incident with a Cabinet level member as the principal agent. Yet, this hierarchical design is the baseline for our current response system.

Some experts have looked to lessons learned from Hurricane Katrina and suggested this hierarchical style response system may not support a

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nuclear detonation scenario. Some have submitted that local and state governments will be overwhelmed with the magnitude of the calamity.¹⁹

The former director of operations for United States Northern Command at the time of Hurricane Katrina argues some have incorrectly interrupted the lessons learned. In the affected coastal states, different areas dealt with the disaster conditions in different ways to different measured outcomes. He describes the local and state responders in Alabama and Mississippi having the ability to conduct adequate initial response actions, which led to successful outcomes. Because of their cooperative local and state government relationships, especially in the emergency coordinator offices, each tier of government called for and incorporated higher tier government assistance. His top three lessons learned from Hurricane Katrina are 1) local responders are critical to the initial response²⁰ 2) the relationship between the local and state emergency response and coordination staffs is critical to success 3) an inclusive list of critical and essential key infrastructure and facilities must be maintained and disseminated to all levels of responders.²¹

Federal Government Assumes Control

It is important to combine the lessons from a past incident of national significance with the overwhelming effects of a nuclear detonation. The federal government needs to plan realistically and must consider the following. First, a nuclear detonation will be of such national significance the President must be involved in the response. Second, the devastation of a nuclear detonation will require assets greatly exceeding local and state governments' capabilities. Third, all local and state governments have not developed to a common response level, making federal support areas across the country more challenging. Fourth, one must assume a nuclear terrorist attack may be followed by a second nuclear attack at another locale. For these reasons, this paper recommends the federal government must assume the lead role from the state and local authorities after a nuclear detonation. In the lead role, the federal government is required to develop an emergency response plan integrating all its agencies and local partners.²² Congress should prepare for this catastrophic event by establishing the mechanism to transfer authority immediately upon detonation which will help ensure continuity of incident command. Local

responders will still be first on the scene and will continue to play an important role throughout the emergency. Out-of-state and federal personnel, many especially equipped and trained for these events, will outnumber these local responders shortly.

Shelter Decision

In both of the above cases, individuals attempting to flee the area may increase the risk of radiation fallout to themselves. In a 10-kt scenario, except for individuals nearest and immediately downwind the epicenter, most individuals should remain indoors (preferable underground) and increase the buildings' shielding properties for at least three days.²³ The fallout shelters of the Cold War may not have prevailed in a superpower nuclear exchange, but in our scenario, fallout shelters are extremely beneficial. In the Washington, D.C. metropolitan area, many of the commercial and government buildings have basements and areas suitable for fallout shelters. Long term planning to include the use of government tax incentives could increase the number of usable fallout shelters built in new construction. However, staying in a shelter or basement after a nuclear attack is counter to the human instinct to flee. Approximately 80% of the 2.5 million individuals in Washington, D.C. commute into the city for work. It is unrealistic to assume mass area evacuations will not occur. Education of the population and prior planning and testing are essential to a successful shelter-in-place campaign.

Communication Message

A well informed press would be extremely beneficial to accurately disseminating the coordinated plans during the initial crisis response. Unlike an aerial detonation, the electromagnetic pulse caused by a ground bust will not destroy the region's communication capability. The primary blast and fireball effects will cause the vast majority of the lost communication capability.²⁴ These losses can be mitigated through prior planning. Similar to 9/11, cellular phone networks will be saturated. Government Emergency Telephone Service (GETS) and Wireless Priority Service (WPS) should remain effective on landline phones, where phones

are available and in service.²⁵ Thus, with the ability to communicate with the population, the government should have the ability to provide guidance to the masses. The Emergency Alert System (formerly known as the Emergency Broadcast System) can function as the backbone for the appropriate government agency to issue a plethora of instructions.

Regardless of the communication medium, the government will need a consistent message. RAND estimates authorities should have initial radiation plume analysis within two hours of detonation.²⁶ With this information, the government can issue mandatory evacuation orders for areas contaminated by excessive radiation levels, and outline the areas where shelter-in-place is appropriate. Describing to the public that being stranded in a gridlocked highway system without any shelter is the most dangerous place to be is a message that must be consistent and timely.

Interaction between the federal government and local communities is critical to establishing continuous training and planning for individuals working in government and commercial facilities especially in large metropolitan regions to conduct an appropriate nuclear response. The facility owners, operators, or custodians must be prepared to shepherd the inhabitants into a prepared facility. Additionally, all tiers of governmental response plans must address the natural instinct to rejoin spouses, parents, and children during an emergency. In recent years many communities have enacted provisions to improve the protection and accountability of schoolchildren, restricting parental access to children during the initial stages of an emergency. These provisions will hamper parents' ability to collect their children before commencing other post-attack reactions. The integrated crisis reaction plans must address the probable increased confusion and congestion caused by parents attempting to reunite with their children.

Transportation Dilemma

An additional benefit of sheltering the population in place is the relief on the transportation system.²⁷ Without a functioning transportation system, emergency workers and mandatory evacuation individuals cannot move freely. The federal government, in conjunction with local and state governments, needs to develop a process of opening and closing parts of the transportation system to facilitate this movement. Without preplanning for how to modulate the flow of traffic and who will do it, the ensuing confusion

of a mass exodus will severely limit freedom of ground movement. Providing adequate transportation for responders to activity locations like radiation decontamination centers, hazardous waste collection points, and medical triage centers must be incorporated into this response plan.²⁸

An additional consideration to the transportation dilemma involves prevention of another nuclear detonation. As mentioned earlier, the government must assume additional devices exist after the detonation of the first one. This will force the government to maintain a state of crisis until they have ascertained and processed additional information.²⁹ This assumption will force local, state, and federal governments to enact additional protective measures. The government can quickly determine whether the nuclear detonation occurred in the air or on the ground. Also, the use of a missile can quickly be determined. With the two above cases, it is assumed that terrorists use land and sea transportation as a delivery method. This will cause all similar forms of transportation to become suspect. This will have a national, if not a global, impact as state and local governments enact drastic protective measures to search for other devices. These measures may include attempting to inspect all commercial trucks prior to entering a large metropolitan area. These inspections will require tremendous amounts of equipment and manpower as well as comprehensive planning. It is believed that commercial transportation will come to a halt. Inventories of essential items around the country may quickly evaporate. Federal and state governments must examine this issue to develop an integrated plan for restricting and inspecting commercial carriers and favoring the transport of essential life-sustaining items. It is beyond the scope of this paper to examine the economic impact of shutting down the commercial trucking and shipping system.

Former Senator Sam Nunn summarized an immediate aftermath of governmental responses to a nuclear terrorist attack as a wish list. Shortly after a nuclear detonation, the government will wish it had developed a sophisticated local, state, and federal integrated response plan. The responders will wish the plan had been tested, rehearsed, and refined. And finally, the government will wish it had implemented a serious public education campaign reminiscent to the Cold War Civil Defense programs of the 1950s.³⁰ To accomplish successfully what Senator Nunn suggests requires Congress to establish the federal government as the lead agent for this contingency. The authority to lead includes the responsibility to plan

and prepare. A nuclear attack would be overwhelming and catastrophic, and the federal government is uniquely qualified to synchronize and execute the response. According to the Department of Homeland Security, the greatest mitigating factor for a nuclear attack is the speed and appropriateness of decisions and the effectiveness of the information disseminated.³¹

Though it is beyond the scope of this paper to examine subsequent attacks and preventive means and actions, maintaining a strategic reserve capability must be mentioned. Prudence requires assuming a second attack and initiating preparatory actions. The question will arise of how much of one's highly skilled and limited response assets should the government withhold from the immediate catastrophe in order to respond to another possible terrorist attack.

The review of what the government will need to do will produce a list of items requiring pre-detonation action. After detonation the President will respond, but under what authority? The authority of the President derives from the Constitution or from congressionally mandated statutes. The United States has faced emergencies and threats to survival in the past. Congress has attempted to delegate additional authority to the President beyond those in the Constitution during these emergencies. And the courts generally have been permissive in their rulings on the constitutionally or legality of executive crisis directives. However, the trinity of the United States government has on occasion internally disagreed.

What is the Authority Used to Respond?

Necessity hath no laws.

—Oliver Cromwell

Many weapons of mass destruction experts have studied catastrophic chemical, nuclear, and biological attack scenarios. Many of these scenarios develop and progress until disintegration of civil obedience and loss of governmental control occurs, caused by the rapidly eroding essential assets, and the President's final option might be to order martial law. The Constitution does not explicitly grant the Congress or the President the authority to declare martial law. But it does give different

branches of government partial control over the armed forces in time of national need. Article 1, Section 8, Clause 15, of the Constitution states Congress has the power “[t]o provide for calling forth the Militia to execute the Laws of the Union, suppress insurrections and repel invasions.” Article II, Section 2, Clause 1, of the Constitution declares, “The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into actual Service.” Additionally, the Constitution addresses the government’s responsibility to address civil disturbances in Article IV with “The United States shall guarantee to every state in this union a republican form of government, and shall protect each of them against invasion; and on application of the legislature, or of the executive (when the legislature cannot be convened) against domestic violence.”

So in a nuclear terrorist attack scenario should the President impose martial law? This is not a simple question to answer. First, for a country founded on the principles of liberty and freedom, martial law may appear ill advised, a road to dictatorship. Indeed these are recent cases in embattled lands where the rule of law has been lost by such martial law decrees. Before we address the question of whether a President should impose martial law, we must first determine if such action is legal. It is appropriate to define what martial law has meant to our country by reviewing periods of imposed “martial law” and the associated Supreme Court opinions. This paper uses four Supreme Court decisions to anticipate the future legality of imposing martial law. But what does martial law mean? Unfortunately, this is not as clear as we may like.

Martial Law Defined

Stare decisis, or law of precedence, is a basis for the United States’ legal system.³² The foremost legal precedent is a Supreme Court opinion. Unfortunately, there is a dearth of martial law rulings, making it difficult to develop a complete set of governing procedures. This leaves us without a precise martial law definition. The court has written about the boundaries of martial law rather than the entity. This has forced scholars to develop a working definition based on necessity. Here is one such definition of the term.

Martial law is the public law of necessity. Necessity calls it forth, necessity justifies its exercise, and necessity measures the extent and degree to which it may be employed. That necessity is no formal, artificial, legalistic concept but an actual and factual one. It is the necessity of taking action to safeguard the state against insurrection, riot, disorder, or public calamity. What constitutes necessity is a question of fact in each case.³³

Additionally, the United States Code of Federal Regulations has codified a similar definition. It states, “Martial law depends for its justification upon public necessity. Necessity gives rise to its creation; necessity justifies its exercise; and necessity limits its duration.”³⁴

Understanding martial law dictates a historical review of its use and precedents in the United States and Europe. Martial law is invoked, for example, in scenarios like those found in a city under siege. Periods of grave public disorder have caused domestic militaries to impose martial law upon the towns where the problem existed.³⁵ During our country’s formative years, the United States imposed martial law in Massachusetts, Virginia, and Louisiana. More interestingly, General Andrew Jackson at New Orleans in 1814, made a list of proclamations in preparation for the forthcoming battle with the British. He declared that everyone entering the city had to check in with the Adjutant General. No one was allowed to depart the city without his or his staff’s approval. No vessels or boats were permitted to leave the immediately surrounding waters without his approval. Street lamps were to be extinguished at 9PM, and no one was to be on the street without permission. All able bodied men of all races were compelled to serve in the army or navy. The old and infirmed were formed into reserve units or compelled to join the police force. Jackson also suspended the writ of Habeas Corpus.³⁶ Because the courts were open during the period of Jackson’s proclamation, a disagreement over legal authority arose. General Jackson and a United States District Court judge both issued orders to jail and fine each other, after the judge issued a dissenting writ. This humorous incident foreshadows the contentious issue of the legality, breadth and depth of martial law.³⁷ Next, this paper discusses the background for the four Supreme Court cases.

Conditions of Necessity

Though General Winfield Scott declared martial law during the Mexico campaign, the United States Civil War brought a significant challenge to the legality of martial law and the government's authority to impose it. Early in the Civil War, President Lincoln imposed martial law not only on insurgent enemies in the insurrectionary states but also "their aiders and abettors within the United States, and all persons discouraging volunteer enlistments, resisting militia drafts, or guilty of any disloyal practice affording aid and comfort to rebels against the authority of the United States."³⁸ These proclamations of martial law included the suspension of the writ of Habeas Corpus for any persons about to depart from the United States or absenting themselves from their county or state to avoid the draft.³⁹

More recently, the government imposed martial law in the Hawaiian territory at the start of World War II, and this incident gives us a modern era court opinion. The governor received permission from the President to impose martial law on the Hawaiian Islands after the Japanese bombed Pearl Harbor. Congress passed the Hawaiian Organic Act detailing the jurisdiction and limits of martial law. The governor appointed a military commander as a military governor and suspended the writ of Habeas Corpus. The Act authorized the military to arrest and prosecute civilians and to remove the rules of evidence and the civilian sentencing laws.

The last two important cases arise from measures imposed in February 1942. The War Department appointed a military commander to impose martial law measures on the western United States. The most well known of these measures was the curfew imposed on all alien Japanese, German, and Italian and individuals of Japanese descent, residing in the United States and the internment of over 110,000 Japanese-Americans.

Supreme Court Analysis of Martial Law

First, during the early period of the Civil War, President Lincoln imposed martial law, and Congress refused to ratify his suspension of writ of Habeas Corpus. In March 1862, the events of the war caused a change. Congress passed the statutes which "authorized the President to suspend the writ whenever he thought necessary and to detain those persons under

arrest by the military authorities without interference by the civil courts.”⁴⁰ Lambdin Milligan, along with several others in the State of Indiana, was arrested and tried for treason. A military commission found him guilty and sentenced him to be hanged. His appeal eventually was heard by the Supreme Court.

In *ex parte Milligan*, Milligan argued the military commission did not have jurisdiction over him since he was not a member of the military service. The government argued the military commission had jurisdiction based on the President and the Congress suspending the writ of Habeas Corpus based on the necessity of war and the imposition of martial law. The Supreme Court overturned the conviction rejecting the government’s argument of the law of war justifying the use of the military commission. The court based its decision on the fact the courts in the State of Indiana were open at the time of the military commission.

Of note, the Court added the government had not followed the congressionally mandated guidance for the suspension of the writ of Habeas Corpus.

[T]his court has judicial knowledge that in Indiana the Federal authority was always unopposed, and its courts always open to hear criminal accusations and redress grievances; and no usage of war could sanction a military trial there for any offense whatever of a citizen in civil life, in no way connected with the military service... One of the plainest constitutional provisions was, therefore, infringed when Milligan was tried by a court not ordained and established by Congress.⁴¹

A significant point of this ruling hinges on the fact the executive branch, referred to as the government, ignored the mandates of Congress, since no necessity existed in the State of Indiana. This placed the President and the Congress in opposition over implied constitutional authority. The Court also rendered in dicta the opinion that the Constitution only explicitly allows for the suspension of one enumerated right, the writ of Habeas Corpus. But it did infer situations may develop where the imposition of martial law exist. Yet, it held in addition to the prerequisite of necessity for martial law, the courts must be closed. So it can be concluded this Court considered the conditions for martial law are met

when: 1) they are applied on in strict conditions of necessity, 2) declared only in a time of war, 3) issues are resolved by military commissions only when the courts are closed, and 4) such decrees only pertain in locations proximate to the war. Importantly, in the execution of emergency powers the President must act in conjunction with congressional will.⁴²

During the period of martial law in the Hawaiian territory, a military tribunal accused and tried two civilian individuals on charges of embezzlement and assault, respectively. In *Duncan v. Kahanamoku*, the Supreme Court ruled a military tribunal did not have jurisdiction in these cases. The government argued Congress had passed the Hawaiian Organic Act, authorizing the imposition of martial law including the suspension of writ of Habeas Corpus. However, the Court ruled that when Congress enacted the Hawaiian Organic Act, they did not wish to exceed the boundaries between military and civilian power in which our people have always believed. It is clear Congress always intended the citizens of Hawaii the same constitutional entitlement and protection as provided to citizens living elsewhere in the United States. So even though Congress authorized martial law, including the suspension the writ of Habeas Corpus, the courts were open and the perpetrators where not infringing on the security of the territory in the commission of these crimes. The Supreme Court ruled that even though the President and the Congress were acting in conjunction, the government's use of a military tribunal was not a necessity relative to the existing security conditions in that case.⁴³

The third and forth cases are examined together because of the overlapping circumstances and the similarity of the rendered opinions. Both cases involved individuals of Japanese descent and the World War II martial measures put in place by the War Department to attempt to mitigate the threat of a possible invasion by Japanese forces along the Pacific coast of the United States. The War Department authorized martial law measures, but martial law itself was not imposed. On the surface, these cases are about the government's ability in a crisis to deny citizens the exercise of their civil rights in order to cope with a severe security threat. Thus, the circumstances of these cases warrant a review to understand the Supreme Courts' opinion of martial law.

The Supreme Court considered the legality of the government's actions. Both of these cases involved a violation of the military sanctioned measures of curfew or confinement. In *Hirabayashi v. United States*, the

Court upheld a curfew placed on Japanese Americans during the war. In *Korematsu v. United States* the Court justified the apparently random internment of Japanese Americans. As with all of these studied cases, an evaluation of Presidential and Congressional actions must incorporate the social and political conditions that existed at that time. In both these cases, the Supreme Court recognized the Constitution authorizes certain officials to enact and enforce measures in a time of war that otherwise would not be allowed. Those decisions are based on the decision-maker's judgment, and the Court ruled its judgment would not supplant that of those officials who were elected or appointed to make those decisions. In *Hirabayashi* the Court rendered

[T]he conditions call for the exercise of judgment and discretion and for the choice of means by those branches of the Government on which the Constitution has placed the responsibility of war-making, it is not for any court to sit in review of the wisdom of their action or to substitute its judgment for theirs.⁴⁴

Korematsu is particularly useful in anticipating the Courts' reaction to the implementation of martial law. The Supreme Court again recognized the principle of necessity but also implied conditions *may* exist where previously unacceptable actions become warranted. Additionally, the Supreme Court recognized the level of the actions taken must be proportionate to the level of the threat by stating, "when under conditions of modern warfare our shores are threatened by hostile forces, the power to protect must be commensurate with the threatened danger."⁴⁵ Finally, although this court evaluated the conjoined actions of the President and the Congress, they did not render any opinion in cases where the President diverged from Congressional intent.

Though the last two cases are not explicitly about martial law, much can be inferred about future Court opinions. Interestingly, it has been inferred from the member casting a dissenting vote in *Korematsu* that a properly imposed martial law would have changed his vote.⁴⁶ However, none of these or other United States cases directly discusses the Presidential authority to impose martial law. Taken together, these cases produce five principles a President should consider when contemplating the declaration of martial law.

First, the Supreme Court has yet to deem the practice of martial law itself unconstitutional. Second, the Court recognizes there are some Presidential emergency powers not explicit in the Constitution. Third, there are limits to the Presidential emergency power. Fourth, when the President and the Congress acts together, this is the highest level of credibility for executing implied powers. And fifth, the Court will afford the President authority commensurate with the level of threat and the extremity of the conditions. In light of the nuclear detonation scenario, it appears the President does have the legal authority to imposed martial law. Explicit Congressional approval enhances this authority. Congress has granted standing authorities based on previous events. These standing authorities provide the President other options to consider for our scenario. Congress has also passed laws limiting the executive's authority based on precedents from past events. For example, the Posse Comitatus Act limits what the executive can have the military carry out.

Posse Comitatus

Posse Comitatus means power or force of the country. Following the end of the Civil War, the United States used its army to maintain order and civil obedience in the southern states. For several years, the military was given almost free reign to govern the rebellious states. The issue of military rule came to a head during the disputed 1876 Presidential election when three states disputed their electoral votes. Coincidentally, the incumbent President employed thousands of federal troops and special marshals in these same three southern states to guard polls and prevent fraud. In response, the losing political party submitted legislation preventing future military funding from "supporting...any state government or office." Though this bill did not make it through committee, the subsequent Congress modified the legislation and passed a bill prohibiting the Army from enforcing civil laws.⁴⁷ The bill signed in 1878, became known as the Posse Comitatus Act. Over the years the Posse Comitatus Act has been modified to now include the Army and Air Force,⁴⁸ but it still excludes the Navy. However, the Department of Defense has developed internal regulations placing the same limitations on the Navy and the Marines. The Act does not include the National Guard unless they are under federal service.⁴⁹ The Act does include provisions

for exceptions for constitutionally and congressionally mandated military enforcement.

The first constitutional exception is an emergency authority to prevent loss of life or property during serious disturbances or calamities.⁵⁰ The second authority allows the use of military forces to protect federal property and governmental functions.⁵¹ Various congressional statutes allow direct military support to civilian law enforcement and are considered Posse Comitatus Act exceptions. Title 10 U.S.C. Sections 371–382, authorizes military and civilian law enforcement to share information and equipment to include operation and maintenance of the equipment. The military also has greater latitude to support the Secret Service for the protection of government officials. However, it does not allow the military to make arrests or conduct search and seizures.⁵²

In the last exception, Congress delegated the authority to the President to call forth the military to quell insurrections and civil disturbances with the Insurrection Act of 1807. Most recently amended in the 2007 Defense Authorization Act, it is now Title 10 U.S.C. Sections 331–333. The Act authorizes the President to employ federal troops to suppress an insurrection upon the request of the state government as part of the federal responsibility to “protect states against domestic violence.” Congress has delegated the authority to suppress an insurrection, domestic violence, unlawful combination, or conspiracy that deprives any part or class of people of a constitutional right, privilege, immunity, or protection. The Act also authorized the President to order insurgents to disperse and retire peaceably to their abodes.⁵³ In 1992, the President invoked the authorities of this Act during the Los Angeles Riots at the request of the California governor. Twice, the President invoked the authorities without the request of the governor. In both cases, the President considered the governor culpable of the disobedience. The President sent federal troops in 1957 to Central High School in Little Rock, Arkansas to implement the integration of the school system. Similarly, the President sent troops to Alabama in 1963 to enable racial integration at the University of Alabama.

Stafford Relief and Emergency Assistance Act

The Robert T. Stafford Relief and Emergency Assistance Act of 1974, amended several times hence, provides the regulatory framework

for the President's declaration of an emergency or major disaster. This Act established Federal Emergency Management Agency's (FEMA) statutory basis for disaster relief. Though sometimes misunderstood, the Stafford Act provides no independent Department of Defense statutory basis for disaster assistance. Additionally, the Stafford Act does not provide statutory exception to the Posse Comitatus Act. This declaration permits federal assistance to local and state agencies combating the effects of an emergency or major disaster exceeding the capabilities of the local government. This request for a declaration must come from the governor of the effected state.

The Stafford Act provides for the flow of federal assistance and funding under three scenarios. The most basic is the Presidential Order to perform emergency work using federal agencies which may include the Department of Defense. The second and third scenario requires starting with a statutory definition.

This statute contains two important definitions.

1. **Emergency.** "Emergency" means any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States.
2. **Major Disaster.** "Major disaster" means any natural catastrophe (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.⁵⁴

An Emergency Declaration is limited in scope and without the long-term federal recovery programs of a Major Disaster Declaration. The federal assistance and funding is designed to meet a specific emergency need. The Presidential Major Disaster Declaration puts into motion long-term federal recovery programs. The federal assistance and funding is designed to help disaster victims, businesses and public entities. The governor's request for the Major Disaster Declaration requires the state to commit state funding and resources for the long-term recovery effort. The Federal Emergency Management Agency evaluates the governor's request and makes a recommendation to the President. This process culminates with a Presidential decision concerning the declaration which could take from hours to weeks.⁵⁵

It is useful to understand the scope of this Act using historical examples. On August 28, 2005, in response to Hurricane Katrina, President Bush issued a Major Disaster Declaration for Florida followed on August 29, with a Major Disaster Declaration for Louisiana, Mississippi, and Alabama. On September 24, in response to Hurricane Rita, President Bush issued a Major Disaster Declaration for Texas and Louisiana.⁵⁶

National Emergency Act

The President also has options under the National Emergency Act (Title 50 U.S.C. Section 1601). Ironically, Congress sought to rectify long-standing National Emergency proclamations still open years after the termination of the incident. The National Emergency Act enacted in 1976, placed a two-year limit on any national state of emergency, but it did not provide a definition of what constituted an emergency. The test is subjective and is determined by the President, and his decision is final, not reviewable or reversible. Upon a National Emergency declaration, hundreds of Congress enacted standby laws, permitting the President to act in ways that would be impermissible in absence of the crisis. The President can commit troops abroad without Congressional notification, call up Reserve units to active duty, enter into defense contracts without the usual contracting procedures, recapture certain land and waive caps on headquarters management personnel.

Again it is helpful to understand the magnitude of this Act through an historical example. Through proclamation President Bush "declare[d] that

the national emergency has existed since September 11, 2001.”⁵⁷ He outlined which provisions of the Act he would utilize. One provision of the Act is self-termination after two years. However, periodically since 2001, the President has declared the state of the National Emergency continues and has extended the declaration. It is currently extended through 2010.

Recommendations

Every senior leader, when you're asked what keeps you awake at night, it's the thought of a terrorist ending up with a weapon of mass destruction, especially nuclear.

— Secretary of Defense, Robert Gates

The destruction caused by a domestic nuclear detonation would be horrific, but it would not be fatal to the continued existence of the United States. The emotional and psychological damage to the American people, government, and way of life may exceed the physical and economic damage. However, nature, including humans, exhibits incredible resiliency when stressed with termination. The resiliency and rate of returning society back to a level of normalcy are enhanced through the speed and appropriateness of response decisions and the information's dissemination. This paper examines a domestic nuclear attack scenario and recommends a list of federal actions most beneficial to emergency response success. These recommendations fall into two broad categories: what are the pre-attack actions including the required planning and coordination, and what are the post-attack options. The most critical actions hinge on the federal government assuming the lead role for responding to any domestic nuclear attack.

Federal Government Takes Lead

A nuclear attack would be a catastrophic incident of national significance (global significance may be more appropriate). For the

reasons stated above, the federal government needs to prepare to take control of the response for such a horrific event. The federal government should command and control the response at the local, state, national, and international level. Only the federal government's unique span of control allows for the simultaneous and successful execution at various levels. The entirety of the federal government will be needed to support the response.

There are three sub-elements to this recommendation. First, laws and regulations should immediately delegate response authority to the federal government following a nuclear detonation. Second, this authority should include the inherent responsibility of crisis planning and coordinating. The complexity of vertical and horizontal governmental planning requires a comprehensive set of federal guidelines and principles to lead the state, local, interagency, and non-governmental planning processes. Third, disaster-recovery plans will require testing and rehearsal. While it may be politically unachievable to interrupt the lives of all in a large metropolitan area by disrupting traffic and city access for an exercise, the government cannot evaluate effectiveness and efficiency of the plans solely through tabletop exercises. Again, only the federal government possesses the ability to test and rehearse a gigantic nuclear detonation response combined with any subsequent nuclear detonation responses needed in different locations.

Establish Education Program

In a single nuclear device scenario, the human instinct to flee is counter to what for many will be the more appropriate response to shelter-in-place. Once a detonation occurs, immediate confusion will likely overwhelm attempts by authorities to communicate with the public and to relay the best means of reducing exposure to the radiation. Only through a comprehensive, long-term program can one expect a significant portion of the population to understand the appropriate response for each of them to a nuclear attack on their locale. A multipronged approach should include, but not be limited to, the school system, the press, and the mass appeal. Fortunately, the national school system affects the majority of the population. The school system approach captures the greatest United States audience. Second, the continual education of the press enables more

accurate broadcasting during the initial stages of the incident. Third, because the mass media reaches large portions of the population, the federal government should mandate a series of periodic public broadcasts for the purposes of establishing a baseline program of public education and interaction.

Congress Authorizes Martial Law

Scholars have distilled five guiding principles for the legal imposition of martial law. Reviewing these principles allows one to assume the conditions for martial law will exist. A nuclear detonation will produce the required level of necessity. Because the majority of nuclear response capability resides in the Department of Defense, specially equipped military units will augment and may supplant local and state responders. Any Presidential decision to use the military force to control the population and guide the response will legally need to be commensurate with the necessity of the situation. In the area surrounding the explosion's epicenter, the government will close most normal services, including the courts. Congress may not be able to convene immediately. Thus, Congress should establish the conditions which automatically authorize the President to impose martial law, suspend the writ of Habeas Corpus, and use the armed forces to exercise authority. In aggregate, these conditions will satisfy the guiding principles to impose martial law in the grim scenario where terrorists have detonated a nuclear bomb in an American city.

Conclusions

A terrorist attack on the United States remains a very real and dangerous possibility. Armed with nuclear or biological weapons, these terrorist attacks become a threat to national security. Congress and the President have previously mandated a comprehensive plan be developed for this scenario. The government's first attempt was revamped after Hurricane Katrina. The subsequent plan, the National Response Framework, provides only cursory guidance. Congress needs to understand the severity of this threat and forego these recycled attempts of

hierarchical response and recovery. Laws need to be enacted granting the President the ability to impose martial law immediately following a nuclear detonation, to include the suspension of the writ of Habeas Corpus. Authority should immediately transfer to the federal government for responding to a nuclear detonation over the rights and authorities of states and local governments. This mandates the federal government take the lead role for planning and rehearsing. The federal government is uniquely capable of exercising and rehearsing the plan. Education improves all aspects of response and recovery. Only through the federal government will nation-wide education be effective. Now is the time to properly prepare for this catastrophic event of national significant.

Notes

1. Graham Allison, "Preface," *Confronting the Specter of Nuclear Terrorism, The Annals of the American Academy of Political and Social Science*, Harvard University, Sage Publication, 9 October 2006, 6.
2. Ibid., 9.
3. Charles Meade and Roger Molander, "Considering the Effects of a Catastrophic Terrorist Attack," RAND Center for Terrorism Risk Management Policy, 2006, 4.
4. U.S. Department of Health and Human Services, Radiation Event Medical Management, "Nuclear Explosions: Weapons, Improvised Devices," Online, Internet, 2 July 2009, available from <http://www.remm.nlm.gov/nuclearexplosion.htm>, (Updated on 8 June 2009).
5. Ibid.
6. Meade and Molander, op. cit., 4.
7. U.S. Department of Health and Human Services, op. cit.
8. Ibid.
9. Ibid.
10. A rad is the amount of radiation required to absorb 0.01 joules of energy into 1 kilogram of matter. 400 rads is a recognized threshold between illness and fatality.
11. Ibid.
12. U.S. Senate Hearing for the Committee on Homeland Security and Governmental Affairs, "Nuclear Terrorism: Confronting the Challenges of the Day After, Impact of Small Nuclear Weapons on Washington, D.C." Testimony of Dr. Cham Dallas, 15 April 2008, 3.
13. David Howe, "PLANNING SCENARIOS: Created for Use in National, Federal, State, and Local Homeland Security Preparedness Activities," U.S. Homeland Security Council, July 2004.
14. The federal government has maintained a document called the *Federal Response Plan* since 1992.

28. . . *Federal Response to a Domestic Nuclear Attack*

15. Bruce Lindsay, "The National Response Framework: Overview and Possible Issues for Congress," CRS Report for Congress, Washington, D.C., 20 November 2008, CRS-2.

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17. Ibid., CRS-9.

18. National Response Framework, NUC-6, On-line, Internet, 2 July 2009, available from <http://www.fema.gov/emergency/nrf/incidentannexes.htm>.

19. Ashton Carter, Michael May, and William Perry, "The Day After: Action in the First 24 Hours Following a Nuclear Blast in an American City," A report based on a workshop hosted by the Preventive Defense Project, Harvard and Stanford Universities, 19 April 2007, 10.

20. Major General Rowe, USA, former USNORTHCOM Director of Operations, cited the failure of the New Orleans initial responders as a documented and well accepted cause for the magnitude of the situation following the hurricane.

21. Major General Rowe, United States Army, Commander, Military District of Washington, D.C. Round Table Panel Discussion, 2008 USAF Counterproliferation Center Conference, June 2008.

22. Carter, May, and Perry, op. cit., 10.

23. Ibid., 12.

24. Ibid., 11.

25. Meade and Molander, op. cit., 19.

26. Ibid., 23.

27. Carter, May, and Perry, op. cit., 13.

28. It has been suggested co-locating triage centers at medical facilities during this kind of mega-crisis may cause an incident where the triage center overflows into the medical facility, reducing overall medical efficiency and response.

29. Ibid., 15.

30. Sam Nunn, "The Race Between Cooperation and Catastrophe," *Confronting the Specter of Nuclear Terrorism, The Annals of the American Academy of Political and Social Science*, September 2006, 46.

31. David Howe, op. cit.

32. Stare decisis literally means to stand by what is decided. On-line, Internet, 2 July 2009, available from <http://www.lectlaw.com/def2/s065.htm>.

33. Major Kirk Davies, "The Imposition of Martial Law in The United States," *Air Force Law Review*, Volume 49, Spring 2000, 88.

34. Title 32 Section 501 Employment of Troops in Aid of Civil Authorities, On-line, Internet, 20 December 2008, available from www.access.gpo.gov/nara/cfr/waisidx_00/32cfr501_00.html.

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36. Ibid., 822.

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38. Ibid., 823.

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40. Major Kirk Davies, "The Imposition of Martial Law in the United States," *Air Force Law Review*, Volume 49, Spring 2000, 96.

41. Ibid., 98.

42. Ibid., 100.

43. Ibid., 102.

44. Ibid., 104.

45. Ibid., 105.

46. Ibid.

47. The exclusion of the Navy was a political compromise.

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51. *Ibid.*, 72.

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